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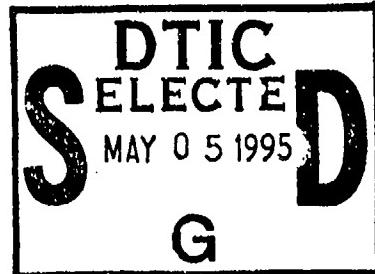
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SCIENTIFIC & TECHNICAL INTELLIGENCE COMMITTEE

*Open Source Subcommittee*

October 1991 - March 1995



Mr Thomas R Pedtke, Chairman

Mr Bruce R Fiene, Executive Secretary  
Administrative or  
Operational Use

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8 March 1995

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## Preface

The Scientific & Technical Intelligence Committee Open Source Subcommittee (STIC OSS) was in existence for three and a half years. In that time, STIC OSS:

- Spawned the Interagency Gray Literature Working Group (IGLWG) through synergy with Community participants.
- Participated in the Open Source Joint Task Force, which advocated the formation of the Open Source Coordination Office (OSCO).
- Participated in the Open Source Working Group, which defined the Community Open Source Program Office (COSPO) to replace OSCO.
- Spawned the creation and hosting of the CONFERENCE Database by NAIC, as a result of interaction between the members of STIC OSS and the IGLWG.
- Had the participation of 38 people from 16 organizations. If the NORS WG efforts are included, there were 52 participants from 17 organizations.
- Published or prepared 7 formal products, 4 of which were in some stage of pre-publication on 8 March 1995, the date of its last meeting.
- Conducted 42 meetings at which 45 presentations were given from staff members from 20 organizations in and outside of the government.
- Had members who also held membership in 10 other open source forums.
- Spawned the development of a tools catalog, through synergy between STIC OSS members and the Advanced Information Processing and Analysis Steering Group (AIPASG). The tools catalog was used as the foundation for the reference database in the Tools Recommendation System (TRS), hosted on the NAIC Open Source Service Agent.
- Distributed the STIC OSS minutes to 141 organizations within the government, military, and authorized contractors. Additionally, 5 of the organizations (CIA, NAIC, NGIC, NSA, & ONI) made further internal distribution of the minutes via message distribution systems and bulletin boards.
- Fostered increased awareness of the need for a Community supported, tools development program, designed to deliver tools to the analysts' finger tips.

- Fostered increased awareness of the need for a Community supported, training development program, designed to have training as an integral part of tools delivery to the analysts.

## **STIC - OSS**

### **Open Source Subcommittee**

*The STIC-OSS was formed in October 1991. The fall of the Former Soviet Union changed the world order from a bi-polar, strategic threat environment to a predominantly tactical or theater threat environment with strategic proliferation overtones. It also resulted in greater access to information through open sources. STIC recognized the need to promote greater access to open source information, its broader use in all source analysis and the need for the development of tools to cope with overwhelming amounts of information in the new Information Age.*

#### **MISSION**

Advocacy within the Intelligence Community is required to focus the proper attention on open source issues and opportunities. The STIC-OSS mission is fourfold:

- 1. Advocate open source information and the formation of DCI level advocacy committees or mechanisms.**
- 2. Advocate the development and use of analytical tools to cope with the volume of textual information.**
- 3. Provide a forum for representatives of the technical analysis community to share information about open source information, access, and analytical tools.**
- 4. Represent the interests of the technical analytic communities of STIC, WSSIC and JAEIC in the Open Source Steering Council.**

#### **FUNCTIONS**

The Subcommittee conducts regular monthly meetings, focusing on the first three mission areas stated above. The chairman of STIC-OSS attends the COSPO Departmental Programs Council as a representative of STIC/WSSIC/JAEIC and as a NAIC/DIISP representative. The committee conducts studies within the community advocating open source information, its value, the formation of an Open Source Information System (OSIS) and the development and use of tools. The subcommittee also sponsors monthly presentations of current topics of interest within the above mission areas. Finally, the subcommittee charters working groups as necessary to conduct special studies and projects. The NORS (National Open-Source Requirements System) working group was formed in the fall of 1991 to articulate concepts for an OSIS, to establish technical analysts inputs for the development of an open

source requirements system and to conduct experiments on the nature and form of open source requirements. The NORS working group completed its tasking in March 1994 and was decommissioned.

## **MEMBERSHIP**

Membership is open to any analytical element of the Intelligence Community. Current analytical membership includes: CIA, NSA, DIA, NAIC, NGIC, NMIC, DoC (NTIS), DoE, WSSIC representative, and JAEIC representative. STIC-OSS meeting are open to other non-analytical representatives from the Intelligence Community. Regular participation is encouraged, in particular, by the open source collector/exploiter elements. Associate members of the subcommittee from this element of the community include: FBIS, CIA library/OSPO, DIA/DIISP and NSA.

## OPEN SOURCE FORUMS

### Analytic Members:

Thomas Pedtke , NAIC (STIC-OSS Chairman):

DIA Executive Agent - DIISP<sup>1</sup>

DOD IC Member - CENDI<sup>2</sup>

COSPO Executive Agent - Open Source Service Agent (OSSA)

Air Force Member - COSPO Departmental Programs Council (DPC)

Phone: (513) 257-6121

Internet: trp59@naic.wpafb.af.mil

Bruce Fiene , NAIC (STIC-OSS Executive Secretary)

Program Manger, Open Source Service Agent (OSSA)

Internet: ossa@naic.wpafb.af.mil

NAIC Member - Advanced Information Processing & Analysis Steering Group

Member - NAIC Analyst Open Source Requirements Team (AOSRT)

NAIC Member (1993-1994) - Interagency Gray Literature Working Group (IGLWG)

Chair (1993-1994), IGLWG Acquisition Subgroup

Phone: (513) 257-6219

Internet: brf53@naic.wpafb.af.mil

Barry Feinstein, NSA

Art Haagsma, DOE

Timothy Hendrickson, NGIC

Program Manager - Project Pathfinder

Co-chair - NGIC Opens Source Task Force (OSTF)<sup>3</sup>

NGIC Member - Advanced Information Processing & Analysis Steering Group

Tom Morgan, PhD, NMIC

NMIC Open Source Project Team

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<sup>1</sup> Defense Intelligence Information Services Program, formerly the Scientific & Technical Intelligence Information Services Program (STIISP).

<sup>2</sup> Commerce, Energy, NASA & National Library of Medicine, Defense Information

<sup>3</sup> The objectives of the OSTF, co-chaired with Mr Dan Gregg, are to implement connectivity and usage of the Internet, NAIC's OSSA, and IC ROSE at NGIC.

**Gus Schoone, DIA  
DIA Member - STIC**

**Chester Schuler, PhD, CIA**

**David Smith, JAEIC Representative**

**Tim Woodruff, DIA-AFMIC**

**-- WSSIC Representative (none appointed)**

**Collectors/Intermediaries:**

**Alice Cranor, DIA  
DIISP Program Manager**

**John Blinde, FBIS**

**Robert Freeman, NTIS**

**Victoria Fox, AFMIC**

**Joan Halpin, CIA**

**Katherine Long, CIA  
Member of OSPO staff.**

**Bobby McMillon, DIA-MSIC**

**Kurt Molholm, DTIC  
Administrator, DTIC**

**Minh Tran-Knechtges, AFMIC**

**George Wood, NSA**

**Alternates:**

**James Anderson, NGIC**

**Paul Ryan, DTIC**  
**Deputy Administrator, DTIC**

**Guests:**

**David Brager, COSPO**

**Fred Haynes, COSPO**

**Dr Larry Hedges, Hq DA**

**Sharon Maksymiec, DIA**

**George Marling, MITRE**

**Former Members:**

**Blaine Baker, NAIC 1991 - 1993**

**James Canfield, PhD, NAIC 1991 -1992**

**Terry Fooshee, DIA 1991 - 1993**

**Tom Goodden, WSSIC 1993 - 1994**

**Fred Haynes, NTIS 1991 - 1994**

**Dennis Rothenberger, NMIC 1992 - 1993**

**Andy Shepard, CIA 1991 - 1992**

**8 March 1995**

**Ross Stapleton, CIA 1992 - 1993**

**Pat Tarry, NMIC 1991 - 1993**

**Bill Johnson, COSPO 1993-1994**

**Mike Pounder, FBIS 1992 - 1994**

**Chair, Interagency Gray Literature Working Group**

## OPEN SOURCE REPORTS

### *Structure and Mechanism of OSIS*, STIC 93-003, April 1993 (For Official Use Only)

This paper presents an overview of the structure and mechanism of an open source information system. The purpose of this system is to provide information at the analysts' finger tips through connectivity and automated tools to provide functionality. The central feature of the system is a storefront to provide users "one stop shopping" in a seamless environment. The information for this report was accepted by the Community to within 95% and used during 1992 to form the basis for the Open Source Information System now being implemented in the Community and starting to come online in 1994. Additionally, the paper outlined issues, such as the information overload and the need for automated tools and training, which require further advocacy to increase awareness and satisfy Community needs.

### *Preparing US Intelligence for the Information Age - Coping With the Information Overload*, STIC 93-001, January 1993 (Unclassified)

This initial paper in the *Preparing US Intelligence for the Information Age* series outlines the fundamental problem facing the Intelligence Community, i.e., an information overload. The paper concludes that development of tools must span the needs of the all-source analysts, the information specialist intermediaries, and the many non-analyst exploiters of open-source information.

### *Preparing US Intelligence for the Information Age - Part II: Analytical Tools To Cope With the Open-Source Explosion*, STIC 93-007, December 1993 (Unclassified)

The IC's ability to obtain open-source data has overtaken its ability to effectively use it. The creation of analytical tools will be the linchpin of our ability to convert this information into intelligence. These tools should enable analysts to locate essential information without having to read every document. The purpose of this paper is to help ensure awareness of the need for these tools and to generate support for institutionalizing analytical tool development within the IC. (In excess of 250 copies were distributed: STIC (35), STIC OSS (25), NGIC (20), NAIC, Air Force, COSPO, & CENDI (65), AIPASG (40), House and Senate Staff (25), House and Senate Intel (10), JAEIC (15), WSSIC (15).)

### *Intelligence Community Open Source Architecture*, an informal paper by Mr Thomas Pedtke, 30 June 1994. (Unclassified)

The Community Open Source Program Office (COSPO) has developed an architecture for the intelligence community's new Open Source Information System (OSIS). The architecture is a multi-phased program featuring connectivity and functionality. *OSIS is based on a distributed architectural concept.* NAIC will prototype an overarching concept for functionality in what is known as the Open Source Service Agent (OSSA). OSSA is a "Gateway to the World of Open Sources." It has four major components: 1) the Storefront, 2) the National Data Bases, 3) the Analyst and Production Interface and 4) the Open Source Requirements Processing System. This paper was distributed electrically to the agencies cited in the section on Open Source Networking.

***The Value of Open Source Information*** (SECRET NOFORN WNINTEL) [In press.]

A compilation of selected examples of open source usage by the Intelligence Community. The diversity of the examples in subject and breath of scope, spanning technology to systems, attests to the broad applicability of open source information as a valuable companion to technical intelligence sources and as a "source of first resort."

***Preparing US Intelligence for the Information Age - Part III: Defining Analytical Tools for Open Source*** (In press.)

The primary purpose of this paper is to define some of the functional requirements for analytical tools that will lead to the effective exploitation of electronic open source information. Since automated analytical tools is a broad topic, STIC OSS has refrained from discussing machine translation and optical character reading software. Ultimately we hope to promote awareness of the problems this Subcommittee has identified and to generate the interests of both Government and the private sector to provide solutions.

***Preparing US Intelligence for the Information Age - Part IV: Training*** (In press.)

The subcommittee has identified some fundamental shortcomings in the capabilities of the Intelligence Community (IC) to deal with the tremendous volume of open-source information that is now available — to say nothing of the massive increases that are expected in the future. The creation and delivery of analytical tools, along with training, will be the lynchpin of our ability to convert this information into intelligence. Training and a continued mentorship of IC analysts will be required to master technical use of the tools, network across the Open Source Information System architecture, and

apply these skills in new and artful ways of performing analysis. The purpose of this paper is to generate support for training of the analysts.

*Preparing US Intelligence for the Information Age - Part V: Information Intermediaries* (In preparation.)

The purpose of this paper is to discuss the role of the information intermediary in the information age. There are some who believe that connectivity, network navigation tools, powerful search engines, and processing tools will replace the need for the information intermediary. The information intermediary will, however, continue to be needed to perform the continuing role of organizing the material so that the modern electronic tools will perform as expected. The information intermediary will continue to be needed, possibly in increased numbers. They will have higher demands for new skills and broader knowledge backgrounds, and they will perform new and changing tasks with the increasing array of tools at their disposal.

## OPEN SOURCE PRESENTATIONS

**1991**

**1992**

**CIA**

Mr Bob Beamer gave an overview of the RTT Project TIES.

Mr Ross Stapleton briefed on Internet and NREN.

**FASTC<sup>4</sup>**

Mr Dale Bostad - FASTC Machine Translation Program

Dr James Canfield - FASTC Open Source Exploitation & Executive Agent Roles

Ms Elaine Gillam - FASTC Library Automation

Mr Thomas Pedtke - FASTC GDIP Issues & Initiatives

Mr Donald Quigley - ADP Environment and Connectivity in the 1990s at FASTC

**FBIS**

Camille Hersh presented an overview of the FBIS Electronic Distribution System (FEDS) being implemented.

**FSAC<sup>5</sup>**

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<sup>4</sup> Foreign Aerospace Science and Technology Center, subsequently renamed the National Air Intelligence Center (NAIC) when it was combined with the 480th IS, 20th IS, and 497th IG.

**Mr Ben Farmer - Overview of FSTC ADP Planning**

**Mr Timothy Hendrickson - Automated Analytical Tools**

**NASA**

**Report on US and Russian Discussions Concerning the Exchange and use of Scientific and Technical Information (STI)**

**OSCO**

**Mr Paul Wallner - Role of the OSCO in the Open Source Arena**

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<sup>3</sup> Foreign Science & Technology Center, subsequently renamed the National Ground Intelligence Center (NGIC) when it was combined with the Intelligence Technical Analysis Center.

## 1993

### CENDI

Mr Kurt Molhom, Chair of CENDI, and Ms Bonnie Carroll, CENDI Executive Secretary, briefed the CENDI program.

### CIA

Mr John Dailey (CIA/CRES) presented a tabletop discussion on the CRES open source training program. A comprehensive portfolio of classified and FOUO materials was used and distributed.

Mr Gus Hunt (OSPO) - Project ROSE

Mr David Sheese (OSPO) - Project ICROSE

### DCI

DCI Open Source Video

### DIA

Mr John Stevens and Mr Terry Fooshee discussed the use of NETMAP at DIA. NETMAP is a data visualization tool.

### FASTC

Mr Scott D Fearheller briefed on gray information collection strategies. The briefing presented the analytical background for collection of gray information, discussed requirements, and gave numerous examples of successful collection strategies. Mr Fearheller ended with insightful observations and a number of opportunities for Intelligence Community collection elements.

Mr James F Setchell briefed on the interface between HUMINT and open source concerning the collection/acquisition of gray literature. Gray literature comes in many shades. As an open source architecture is being established, cultural and security issues will have to be worked out in transferring the acquisition of gray literature to this architecture. Historically, gray literature has been collected via HUMINT since the open source architecture had not been established.

#### **FBIS**

Mr Niel Oberlin & Mr Mike Pounder - FBIS Gray Literature Issues and Projects. The issues and projects covered acquisition, processing, exploitation, distribution, and retention.

#### **MITRE Corp**

Mr Bill Amon (Mitre Corp at NMIC) briefed STIC OSS on the NMIC Open Source Support System (OSSS) and gave an overview of Internet navigation.

#### **NSA**

Mr Dave Epperson - Telecommunications Equipment Database

Mr George Hamlet - Project Renaissance

Mr Bobby Mitchell - Classified Presentation

Ms Deborah Morrissey, Mr Keith Landgraf, & Mr David Kern - Project Enlighten (Internet Software Utilization)

#### **NTIS**

Visit to and Tour of National Technical Information Service (NTIS)

**1994**

**CIA**

**Dr. Joseph Markowitz, Director, Community Open Source Program Office**

**Mr Joe Waters, CIA/Open Source Program Office (OSPO)**

**CSE**

**Mr Matt Mancuso and Ms Gail Hill discussed the NSA Internet node - Project Springtide.**

**DIA**

**Dr Charles Clark gave a technical overview of utilization of open source information and new applications of analytical functionality in operational intelligence collection.**

**Mr. Earl Knapp (S-03/ISSO) gave an overview of Milnet/Internet security issues and participated in a lengthy discussion. The three data/information issues relative to network security are confidentiality, availability, and integrity.**

**DTIC**

**Mr Kurt Molholm, Administrator, presented a comprehensive overview of DTIC's information services.**

**Kaman Sciences Corp**

**Dr Kelly Weaver, Mr Don Moffett, and Ms Laura Mulholland (Kaman Sciences Corp) - Analytical Networks, Processes & Targets, Information Sources, and Findings & Observations.**

**NAIC**

Janet Reynolds, NAIC/SCXX, presented an informative briefing on the Open Source Service Agent (OSSA), with details on the OSSA Task Schedule, the Software Requirements Specifications for the Information Request Management System, and the System Requirements Specification for the OSSA Bulletin Board System.

Mr Thomas R Pedtke, Technical Director, Data Exploitation, presented an overview of the Open Source Information System (OSIS) and the Open Source Service Agent (OSSA). The OSSA is hosted on the NAIC OSIS Internet node.

#### NGIC

Jim Anderson gave an operations overview of utilization of open source information and new applications of analytical functionality in operational intelligence collection.

## 1995

### DTIC

Mr. Ronald Hale gave a brief overview of the 23 Information Analysis Centers (IACs), 15 of which are managed by DTIC. Current awareness information is disseminated by newsletters, selected dissemination, and in cyber space on bulletin board services, home pages, and listservs. Consult <<http://www.dtic.dla.mil>>, an electronic service, offers directory information, current awareness, and product catalogs. Typically, IAC services are free to DoD and Government customers, unless they exceed a certain level of effort, for which there is then a minimal charge. Intelligence Community customers should note this service and take advantage of it by making contact with the IAC Program Office at (703) 247-6260.

Mr. Hale gave a brief overview of the "Northern Sea Route and Icebreaking Technology" study, a product of the Cold Regions Science and Technology Information Analysis Center (CRSTIAC) which really demonstrates use of foreign open source literature (versus information). It has also been demonstrated that this product created new markets for DoD developed technologies and stimulated migration to commercial technology.

Dr Gary Cariveau, Principal Scientist for the Nondestructive Testing Information Analysis Center (NTIAC), reviewed their work on applications for strategic forces and missions. He addressed the results of their study examining use of commercial and open methods of Non-Destructive Inspection and Evaluation to problems associated with Strategic Reconnaissance Missions carried out by Special Operations Forces. This is a non-traditional view of "open source" in that we have identified commercial and open source methodologies and applied them to collection of information not usually considered "open source". This is a very important study because NTIAC learned a great deal about the characteristics information planners regard as valuable (required) for certain high risk, high profile missions, which include target acquisition, area assessment, and post-strike reconnaissance.

Mr Chris Chiesa gave an overview of the Infrared Information Analysis Center's Image Retrieval, Display, and Analysis Support Tool (IRDAST). The tool allows analysts to identify sources of earth images based on information requirements, geographic reference, and cross links to spectral bands. It presents sample images so that analysts can judge whether or not the purchase of commercial images will or will not yield

worthwhile information. This tool has both strategic and tactical military applications, which include fly-through simulation, change analysis, treaty compliance, and pre- & post-strike analysis.

Mr Rob Stern presented an overview of the OmniPort tool set developed by SURVIAC. This tool set is based on the Booz-Allen, Hamilton/Intelligence Community investment in Minerva technology. This tool was developed to assist those in an access & connectivity poor, but data rich environments, by providing seamless access to existing, geographically distributed databases without relocation or conversion. OmniPort, for use with Mosaic and Minerva, is available to assist open source and gray literature analysts find, acquire, and use electronic information from foreign and domestic sources. Mosaic would be used if one does not know what one wants. Minerva, on the other hand, provides directed searches over distributed, heterogeneous databases, when one knows what is specifically needed. Drones used by Minerva are available for WAIS, TOPIC, PAT, BRS Search, Basis Plus & Oracle, (INQUEARY & ARC/Info planned). The drones provide type-neutral data transport using BLOBs (Binary Large OBjects).

#### FBIS

Mr Doug Naquin, Chief, Consumer Services Group, FBIS, presented an overview of the FBIS Hub and Spoke Program. The objective of the program is to maintain and enhance current access to sources, institute optimum acquisition strategies, and incorporate all open sources. The impetus for the review of the acquisition infrastructure came from the growing influence of "new" media, greater world access, and budget factors. The Hubs are self-contained bureaus or units. The Spokes are extensions of acquisition capabilities: 1) remote: Radio and/or press selection, feed, and procurement; and 2) Scan/fax: Press selection and/or feeds, and procurement.

#### NGIC

Mr Timothy B. Hendrickson, Pathfinder Program Manager, presented a short introduction to Pathfinder by discussing analysis done on the confrontation with Iraq during the latter part of 1994. He further stated that Pathfinder is currently used at 21 operational sites by 350 to 500 analysts. Pathfinder will soon be ported over to Solaris. Pathfinder will have operational capability with two other search engines, namely Conquest and Clarit. Mr Hendrickson demonstrated the awesome data visualization

tool Galaxy, which was developed by Pacific Northwest Laboratories. Galaxy examines records in a document display and determines the overall meanings of the groupings of the records without having to read and manually integrate information in the records. The presentation closed with a demonstration of Cameo, a line and block diagram tool to analyze events, processes, and procedures, with the ability to attach comments to nodes. This tool will be released with Pathfinder Version 8.0 on 2 October 1995.

**Open Source Solutions, Inc**

**Mr Robert Steele, President and Chief Executive Officer, Open Source Solutions, Inc.**

## OPEN SOURCE NETWORKING

**Online Distribution of STIC OSS Minutes:** STIC OSS minutes are distributed online to personnel at the following 141 government and military organizations (930 individual addressees) with further distributions made internally at the respective organizations:

- (1) AIPASG: Advanced Information Processing and Analysis Steering Group
- (2) ANL: Argonne National Laboratory
- (3) ARPA
- (4) BNL: Brookhaven National Laboratory
- (5) CIA
- (6) CIA COSPO: Community Open Source Program Office
- (7) CIA OSPO: Open Source Program Office
- (8) Department of the Army
- (9) DIA
- (10) DIA AFMIC: Armed Forces Medical Intelligence Center
- (11) DIA MSIC: Missile & Space Intelligence Center
- (12) DLA: Defense Logistics Agency
- (13) DLA Medical Information Center
- (14) DIA Industrial Support Center
- (15) Defense JC2WC: Joint Command and control Warfare Center
- (16) DNA: Defense Nuclear Agency
- (17) DoD Armed Forces Pest Management Board
- (18) DoD Language School
- (19) DoE
- (20) DoT
- (21) DTIC: Defense Technical Information Center
- (22) DTIC ASIAC: Aerospace Structures Information Analysis Center
- (23) DTIC Crew System Ergonomics Information Analysis Center
- (24) DTIC GCIAC: Guidance & Control Information Analysis Center
- (25) DTIC IRIAC: Infrared Information Analysis Center
- (26) DTIC MTIAC: Manufacturing Technology Information Analysis Center
- (27) DTIC NTIAC: Nondestructive Testing Information Analysis Center
- (28) DTIC PSTIAC: Pavements & Soils Trafficability Information Analysis Center
- (29) DTIC SURVIAC: Survivability/Vulnerability Information Analysis Center
- (30) DTIC TWSTIAC: Tactical Warfare Simulation & Technology Information Analysis Center
- (31) Environmental Protection Agency (EPA) Environmental Monitoring & Systems Laboratory
- (32) EPA Region 8 Laboratory
- (33) EPA Environments Research Laboratory

- (34) ERIM
- (35) FBI
- (36) FBIS: Foreign Broadcast Information Service
- (37) Library of Congress
- (38) LANL: Los Alamos National Laboratory
- (39) NIST: National Institute of Standards and Technology
- (40) NIST Research Information Center
- (41) NIST Atomic Energy Level Data Center
- (42) NLM: National Library of Medicine
- (44) NOAA: National Oceanic & Atmospheric Administration
- (45) NOAA Geophysical Fluids Dynamics Laboratory
- (46) NOAA National Environmental Satellite Data & Information Service
- (47) NATO: North Atlantic Treaty Organization
- (48) NSA
- (49) NTIS: National Technical Information Center
- (50) ORNL: Oak Ridge National Laboratory
- (51) OSAF: Office of the Secretary of the Air Force
- (52) OSD: Office of the Secretary of Defense
- (53) OSTP: Office of Science & Technology Policy
- (54) PNL: Pacific Northwest Laboratory
- (55) SNL: Sandia National Laboratory
- (56) USAF 497th Intelligence Group
- (57) USAF AIA: Air Intelligence Agency
- (58) USAF Air University Institute of Technology
- (59) USAF AOARD: USAF Asian Office of Aerospace Research and Development
- (60) USAF Civilian Engineering Support Agency
- (61) USAF Environmental Technical Applications Center
- (62) USAF EOARD: USAF European Office of Aerospace Research and Development
- (63) US AFIWC: Air Force Information Warfare Center
- (64) USAF IS 315: Intelligence Squadron 315 (Yakoda, Japan)
- (65) USAF Materiel Command Armament Division
- (66) USAF Materiel Command Arnold Engineering Development Center
- (67) USAF Materiel Command Human Resources Directorate
- (68) USAF Materiel Command Phillips Laboratory Geophysical Research Library
- (69) USAF Materiel Command Phillips Laboratory Research Library
- (70) USAF Materiel Command Phillips Laboratory Technical Library (Kirtland AFB, NM)
- (71) USAF Materiel Command Rome Laboratory
- (72) USAF NAIC: National Air Intelligence Center
- (73) US AFOSR: Air Force Office of Scientific Research

- (74) USAF Training Command
- (75) US Army/USAF Offices of the Surgeon Generals Joint Medical Library
- (76) US Army 101st Airborne Division
- (77) US Army 407th Military Intelligence Detachment
- (78) US Army 434th Military Intelligence Detachment
- (79) US Army 500th Military Intelligence Brigade
- (80) US Army Automotive Command Technical Information Center
- (81) US Army Aviation and Troop Command
- (82) US Army Applied Technology Directorate
- (83) US Army Armament, Munitions & Chemical Command
- (84) US Army Armament, Munitions & Chemical Command Bennet Laboratory
- (85) US Army Armor School
- (86) US Army Camp Zama (Japan)
- (87) US Army Cold Regions Research & Engineering Labs
- (88) US Army Command & General Staff College
- (89) US Army Communications-Electronics Command
- (90) US Army Dugway Proving Ground
- (91) US Army Engineer District Honolulu
- (92) US Army Engineer Waterway Experimental Station Headquarters Service
- (93) US Army Explosives Safety Technical Library
- (94) US Army Foreign Military Studies Office
- (95) US Army Fort Stewart
- (96) US Army Information Systems Command
- (97) US Army JFK Special Warfare Center and School
- (98) US Army Laboratory Command Harry Diamond Laboratory
- (99) US Army Madigan Medical Center
- (100) US Army Material Command Headquarters
- (101) US Army Missile Command, Redstone Scientific Information Center (RSIC)
- (102) US Army Military History Institute
- (103) US Army NGIC: National Ground Intelligence Center
- (104) US Army Picatinny Arsenal
- (105) US Army Plastics Technical Evaluation Center (PLASTEC)
- (106) US Army Research Laboratory
- (107) US Army STRICOM
- (108) US Army Test and Evaluation Command - Yuma Proving Ground
- (109) US Army Training and Doctrine Command (TRADOC)
- (110) US Army TRADOC Analysis Command
- (111) US Army TRADOC Armor School
- (112) US Army TRADOC Intelligence Center & School

- (113) US Army TRADOC Intelligence School, Devens
- (114) US Army TRADOC Logistics Library
- (115) US Army TRADOC Ordnance Center & School
- (116) US Army TRADOC Ordnance Missile, Munitions Center & School
- (117) US Army TRADOC School of the Americas
- (118) US Army TRADOC Signal Center
- (119) US Army War College
- (120) US Army White Sands Missile Range
- (121) US Geological Survey Library
- (122) US Naval Air Warfare Center
- (123) US Naval Civil Engineering Laboratory
- (124) US Naval Coastal System Station
- (125) US Naval Health Research Center
- (126) US Naval NMIC: National Maritime Intelligence Center
- (127) US Naval Research Laboratory
- (128) US Naval Oceanographic Office
- (129) US Naval Ordnance Station
- (130) US Naval Personal Resources and Development Center
- (131) US Naval Post Graduate School
- (132) US Naval Sea System Command
- (133) US Naval Surface Warfare Center
- (134) US Naval Undersea Warfare Center
- (135) US Naval Underwater Sound Reference Detachment
- (136) US Navy Office of the Judge Advocate General
- (137) USMC 1st Marine Expeditionary Force
- (138) USMCIA: US Marine Corps Intelligence Activity
- (139) USMC University
- (140) US STRATCOM
- (141) Vandenberg AFB, Technical Library

## INFORMATION DISTRIBUTION & FEEDBACK MECHANISMS

### CIA

The OSPO puts the minutes up on a bulletin board.

### NAIC

Distribution:

The STIC OSS minutes are distributed monthly to the following:

NAIC Tech Directors

DIISP Representatives at AFMIC, DIA, MSIC, NGIC, and NMIC

Over 50 interested analysts and branch chiefs at NAIC by userid

STIC OSS members and others at NGIC, MSIC, DIA, NMIC, and AIA

Profile-based distribution to NAIC analysts via SHAREDOC

Interaction:

NAIC/SC is establishing a bulletin board on the OSSA. Information will be posted on the bulletin board and a place will be designated for analyst comments.

The Analyst Open Source Requirements Team (AOSRT) has been formed and it will be a major conduit for an exchange of information between the Open Source National Community and the analytical staff at NAIC. The AOSRT will support the Open Source Service Agent (OSSA) Program Manager and the Open Source National Community during the time frame that open source architectures are being formalized and operational capabilities developed. The AOSRT will provide planners and developers with the point of view of the NAIC internal customer (TA/GT analysts) and promote the ability to locate Open Source (OS) information useful and necessary for their analyses. The goal is twofold: first, to gain insight on analyst requirements for OS information and second, to expand analysts understanding of the scope and utility of OS data. Membership in the AOSRT is limited to analysts representing GT and TA divisions. The AOSRT will be chaired by PO. Attached to

the AOSRT in advisory capacities will be the OSSA program manager and a TIS representative, as well as an SC representative for advice on tools and hardware to access and exploit OS information. Additional ad hoc members may be brought in on occasion to assist in addressing special problems or concerns.

## **NGIC**

The Pathfinder Project Office is establishing a center-wide "Internet-like" NetNews capability based on NSA's Enlighten Program. In fact, NSA is sending us their software. We intend to establish an Open Source News Group, as well as groups for tools, substantive information, and so on. We should have it operational before the end of November.

## **NSA**

NSA uses its Enlighten Bulletin Board System (briefed at the 11 August 1993 STIC OSS meeting); has recently established a specified Open Source Information Topic on this system to disseminate NSA and Intelligence Community open source activities and other open source items to Agency analysts.

Analysts use this BB Topic to ask open source questions, offer comments and suggestions, or respond to specific tasks sent via the BB, by NSA's Open Source Coordinating Office (E3) or Agency Reps to IC open source committees. E3 reviews and coordinates all analyst feedback and forwards open source "user views" to OSCO, its subcommittees (i.e. Steering Council, Requirements, Architecture) or other committees (ICLC, NII, STIC OSS), as appropriate.

The Enlighten host also serves as the Open Source Topic repository for all correspondence for retrospective retrieval, on demand.

## **NMIC**

NMIC has established a UNIX-based bulletin board system on the SCI LAN and its use to post information of interest to the entire command and to support special interest groups, such as Internet, etc. The connectivity/systems people in NMIC are now working on demonstrating to the NMIC community the benefits of a bulletin board system.

With the implementation of NMIC's Open Source Support System (OSSS) during the next few months and with the move into the National Maritime Intelligence Center (NMIC), a building-wide unclassified LAN with direct connectivity to the Internet at 56 Kbps will be implemented. At that time, USENET news feeds will be available within NMIC. NMIC newsgroups will be established to extend the capabilities of the current NMIC bulletin board system. At this stage it seems realistic to set up newsgroups including open source issues.

The OPEN SOURCE OBSERVER is produced monthly in ONI-331, the Library and Research Division, by Thomas E. Morgan. OSO is available via NMIC email and the Joint Deployable Intelligence Support System (JDISS) with planned distribution via INTELINK. For further information, contact the NMIC Information Center Customer Service Desk: (301) 669-4386, NMIC room 4C113, Suitland, Maryland. Hard copies of the OSO are available in the Information Center.

How often have you heard it said there's a lot of information in open source and on the Internet? Should you be concerned about gray literature, whatever that is? Are you concerned there's not enough time to read and digest what you're already getting? The Open Source Observer (OSO) is designed to explore new ways of dealing with vastly increasing volumes of information. It will report unclassified sources, including ones on the Internet. And it will introduce tools and services that will assist you in mining nuggets from mountains of data.

While the OSO is produced by the NMIC Information Center, it is intended to be a forum across ONI directorates. Have you developed your own way of successfully coping with information overload? Maybe you're aware of, or maybe even developed yourself, open sources and techniques that might be useful to others. Perhaps you would be willing to share, as a guest columnist, your own secrets of working smarter, not harder. Found a book or article you feel might be particularly helpful? Then think about reviewing it for OSO readers.

## **STIC OSS WORKING GROUP**

### **NORS WG**

The STIC OSS National Open-Source Requirements Working Group (NORS WG) was formed at the second STIC OSS meeting in November 1991. The NORS WG first met in December 1991 and upon completion of its tasking from STIC OSS was decommissioned in March 1994. The NORS WG, through the good will of Project Pathfinder, met at Presearch, Inc in Fairfax, VA. Mr Bruce Ronald Fiene (NAIC) was the Chairman.

The Membership of the NORS WG included STIC OSS members as well as a constantly changing argumentation of personnel from the Intelligence Community, depending on the work at hand. The NORS WG stimulated Community discussion on the definition of open source, which contributed to the definition in DCID 2/12-1. Early participation in NORS WG activities by numerous FBIS personnel stimulated the formation of the Interagency Gray Literature Working Group (IGLWG), chaired by FBIS. The NORS WG held special meetings, presented broadly attended demonstrations, ran a pilot open source requirements project, and was the author of a major STIC report on open source.

#### **Special Meetings**

10 December 1991: Mr Fred Harrison, Chair of the Information Handling Committee, presented an overview and outline of Intelligence Community open source information needs in terms of architecture and mechanisms.

19 May 1993:

Mr Scott D Fairheller briefed on gray information collection strategies. The briefing presented the analytical background for collection of gray information, discussed requirements, and gave numerous examples of successful collection strategies. Mr Fairheller ended with insightful observations and a number of opportunities for Intelligence Community collection elements.

Mr James F Setchell briefed on the interface between HUMINT and open source concerning the collection/acquisition of gray literature. Gray literature comes in many shades. As an open source architecture is being established, cultural and security issues will have to be worked out in transferring the acquisition of gray literature to this

architecture. Historically, gray literature has been collected via HUMINT since the open source architecture had not been established.

These special presentations drew a large audience from around the Community, especially from FBIS, evoked much discussion, and initiated actions which are continuing to this day.

12 October 1993: Dr Forrest R Frank, DoD IAC Program Manager, presented an overview of the DoD Information Analysis Centers Program. There are 26 IACs: Airfields, Pavements, & Mobility; Chemical Warfare/Chemical & Biological Defense; Coastal Engineering; Ceramics; Chemical Propulsion; Cold Regions Science & Technology; Crew System Ergonomics; Concrete Technology; Data and Analysis Center for Software; DoD Nuclear Information; Guidance and Control; High Temperature Materials; Infrared; Metals; Metal Matrix Composites; Manufacturing Technology; Nondestructive Testing; Plastics; Reliability; Soil Mechanics; Survivability/Vulnerability; Tactical Warfare Simulation and Technology; Shock and Vibration; Aerospace Structures; and Supportability Investment Decision.

### Demonstrations

7 January 1992: Mr Greg Hathorn, Sales Manger of the SIRSI Corp (Huntsville, AL) presented a demonstration and briefing overview of the Scientific and Technical Information Library Automated System (STILAS). This was followed by a briefing overview and demonstration of a Battelle Memorial Institute IR&D project to develop a shell for an Database Recommendation System (DRS) and a Tools Recommendation System (TRS). The briefing was attended by about 50 personnel from the Intelligence Community and Government Agencies including Mr Fred Harrison (Chair, Information Handling Committee) and Ms Terry Keys (Chair, Advanced Information Processing & Analysis Steering Group).

8 December 1992: In excess of 70 people, from 17 organizations (Battelle, CIA, DTIC, FASTC, FBIS, FSTC, DIA, ICLC, Mitre Corp, NASA, NRL, NSA, NTIS, NMIC, Phillips Laboratory, TRW, USMCIC), were present to hear Mr Bruce Fiene (FASTC) and Mr Mason Soule (Battelle) make presentations. Mr Fiene gave an overview of the Open Source Information System (OSIS) proposed by STIC OSS NORS WG. The major component of OSIS being the storefront. Two major sub-components of the storefront are the Database Recommendation System (DRS) and the Tools Recommendation System (TRS). Mr Soule gave a developmental overview and demonstration of the TRS being developed under IR&D funding at Battelle Memorial Institute.

### **Pilot Open Source Requirements Project**

Between September 1992 and May 1993, the STIC OSS NORS WG ran a pilot modeling exercise focused on an Open-Source Requirements System (ORS). This effort was conducted with Community analytical organizations, Community collectors, and NAIC information provider, computer service, and requirements personnel. Furthermore, it utilized a virtual machine set up on ISS-3 (system high mainframe) and ISS-1 (unclassified mainframe) at NAIC; the account on both systems had the userid: OSINT. Requirements were received in any fashion (DSNET-3, Milnet, FAX, mail, etc), however, it was preferred that they be sent electrically over the DDN to OSINT (osint@dbms-fld.dodiis) or over Milnet to OSINT (osint@fastc-issu.wpafb.af.mil).

The pilot project, in its short existence, actually satisfied open source requirements for Intelligence Community producers of finished intelligence. Among other things, the modeling effort clearly demonstrated that open source materials treated as a commodity in an open source architecture, rather than an intelligence product from an intelligence collection effort, can satisfy analytical needs in less time, at less cost, and with less risk.

### **Report**

#### ***Structure and Mechanism of OSIS, STIC 93-003, April 1993 (For Official Use Only)***

This paper reports the findings and recommendations of the NORS WG and is the product of the tasking from STIC OSS. The paper presents an overview of the structure and mechanism of an open source information system. The purpose of this system is to provide information at the analysts' finger tips through connectivity and automated tools to provide functionality. The central feature of the system is a storefront to provide users "one stop shopping" in a seamless environment. The information for this report was accepted by the Community to within 95% and used during 1992 to form the basis for the Open Source Information System now being implemented in the Community and starting to come online in 1994. Additionally, the paper outlined issues, such as the information overload and the need for automated tools and training, which require further advocacy to increase awareness and satisfy Community needs.

### **Participants**

AFMIC: Minh Tran-Knechtges

CIA: Dr. Chester Schuler

COSPO: Bill Johnson

DIA: Alice Cranor, Terry Fooshee, Gus Schoone

FBIS: Robert Cain, Camille Hersh, Joseph Linz, Carmen Molino, Niel Oberlin, Mike Pounder, David Ross

HQ DA: Dr Larry Hedges

MITRE: George Marling

NAIC: Capt Jerry Coats, Bruce Fiene, Karen Holland, Maj Ron Maynard, Janet Reynolds

NGIC: Jim Anderson, Timothy B Hendrickson

NMIC: Dr. Tom Morgan, Terry Richard, Dennis Rothenberger, August Stitzel

NTIS: Fred Haynes

NSA: Robin DeStefano, Barry Feinstein, George Wood

OSPO: Katherine Long, Jean Koch

USMCIA: Charlie Cutshaw, George Kuruzovich

DIRECTOR OF CENTRAL INTELLIGENCE  
Scientific and Technical Intelligence Committee

STIC 012-97  
3 April 1997

Ms. Kelly Akers  
DTIC-RSM  
8725 J. J. Kingman Rd.  
Suite 0944  
Fort Belvoir, VA 22060-6218

Dear Ms. Akers:

This is to confirm our conversation earlier this week relaying the results of my contacts with the former chairman of STIC's Open Source Subcommittee, Mr. Tom Pedtke. Mr. Pedtke has determined that the 29-page document on activities of the OSS group during the period October 1991 to March 1995 may be released to the public with no restrictions. The material carries DTIC's accession numbers ADM 200340 and ADB 194025.

Sincerely,

*Lindalou Friesen*  
Lindalou Friesen  
Executive Secretary, STIC

*Completed  
22 Mar 2000  
B.W.*